Futures Literacy Through Arts-Based Processes

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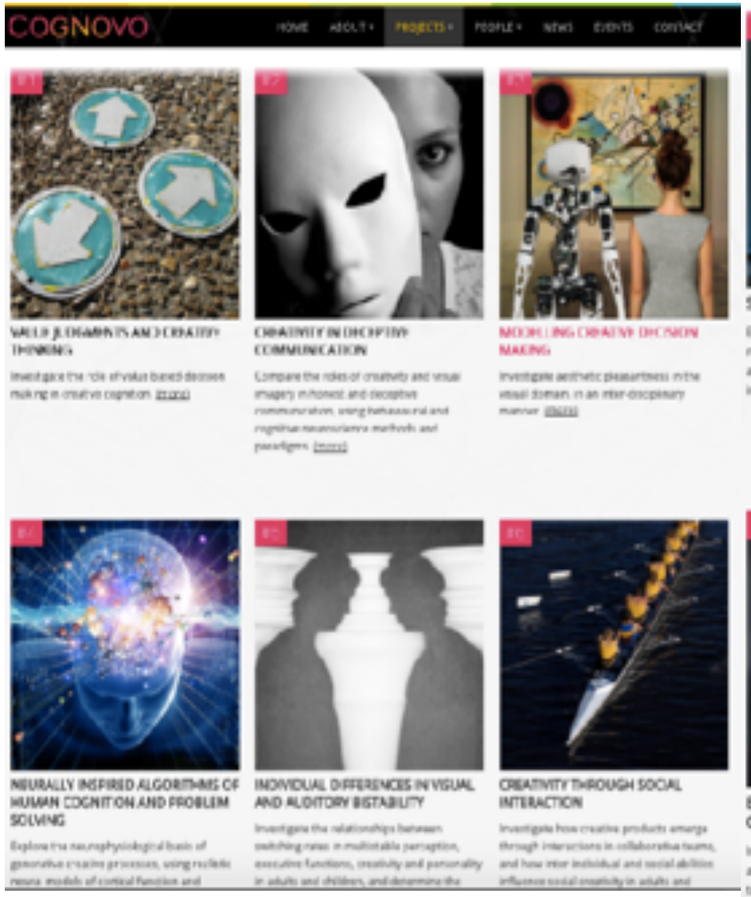
Pluridisciplinary Research in Art + Humanities + Science + Technology

COGNOVO

MARIE CURIE ACTIONS

UNIVERSITY OF PLYMOUTH



#7

SHARED CREATIVITY IN DANCE

Exploring the roles of flow experience and metacognitive strategies: imagery and sense awareness in group creativity in dance improvisation. (more)

#8

BODYSHAPING THE MIND

Designing technologies and aesthetic experiences to support embodied cognition. (more)

#9

DESIGNING PLAYFUL SYSTEMS IN MIXED REALITY

Investigate the nature of play in a practice-based manner by designing and developing playful systems in mixed reality. (more)

#10

PREDICTING CREATIVITY FROM SPATIAL ABILITY & PERSONALITY

Investigate the neurobiological basis for creativity, exploring how biological tendencies or temperament may shape the creative personality. (more)

#11

UNCONSCIOUS CREATIVITY: THE EUREKA MOMENT

Investigate the 'Eureka' moment, using experimental observations of unconscious problem solving in architectual design (more)

#12

SCHEMATA AND THEIR APPLICATIONS

Build a neural system that learns a conceptual hierarchy of (sound-)objects, autonomously searches the underlying conceptual space, and presents the retrieved associative concept-sequence audio-visually (more)

#13

NEURALLY INSPIRED ALGORITHMS OF HUMAN COGNITION AND PROBLEM SOLVING

Explore the neurophysiological basis of generative creative processes, using realistic neural models of cortical function and

#14

INDIVIDUAL DIFFERENCES IN VISUAL AND AUDITORY BISTABILITY

Investigate the relationships between switching rates in multistable perception, executive functions, creativity and personality in adults and children, and determine the

#15

CREATIVITY THROUGH SOCIAL INTERACTION

Investigate how creative products emerge through interactions in collaborative teams, and how inter-individual and social abilities influence social creativity in adults and

#16

EARLY CINEMA AND COGNITIVE CREATIVITY

Investigate the cognitive impact of analogue and digital cinematic film projection technologies. (more)

#17

DEVELOPING CREATIVITY IN COGNITIVE ROBOTS

I aim to build robots capable of insight using Hierarchical Reinforcement Learning. (more)

#18

SIGNS OF ALARM FATIGUE

Investigates the cognitive-behavioural correlates of the subjective experience of 'alarm fatigue'. (more)

#19

THE ROLE OF COUNTERFACTUAL THINKING IN DECEPTION

Investigate how people use alternatives to reality in order to deceive whilst also examining the mechanisms that underlie this

#20

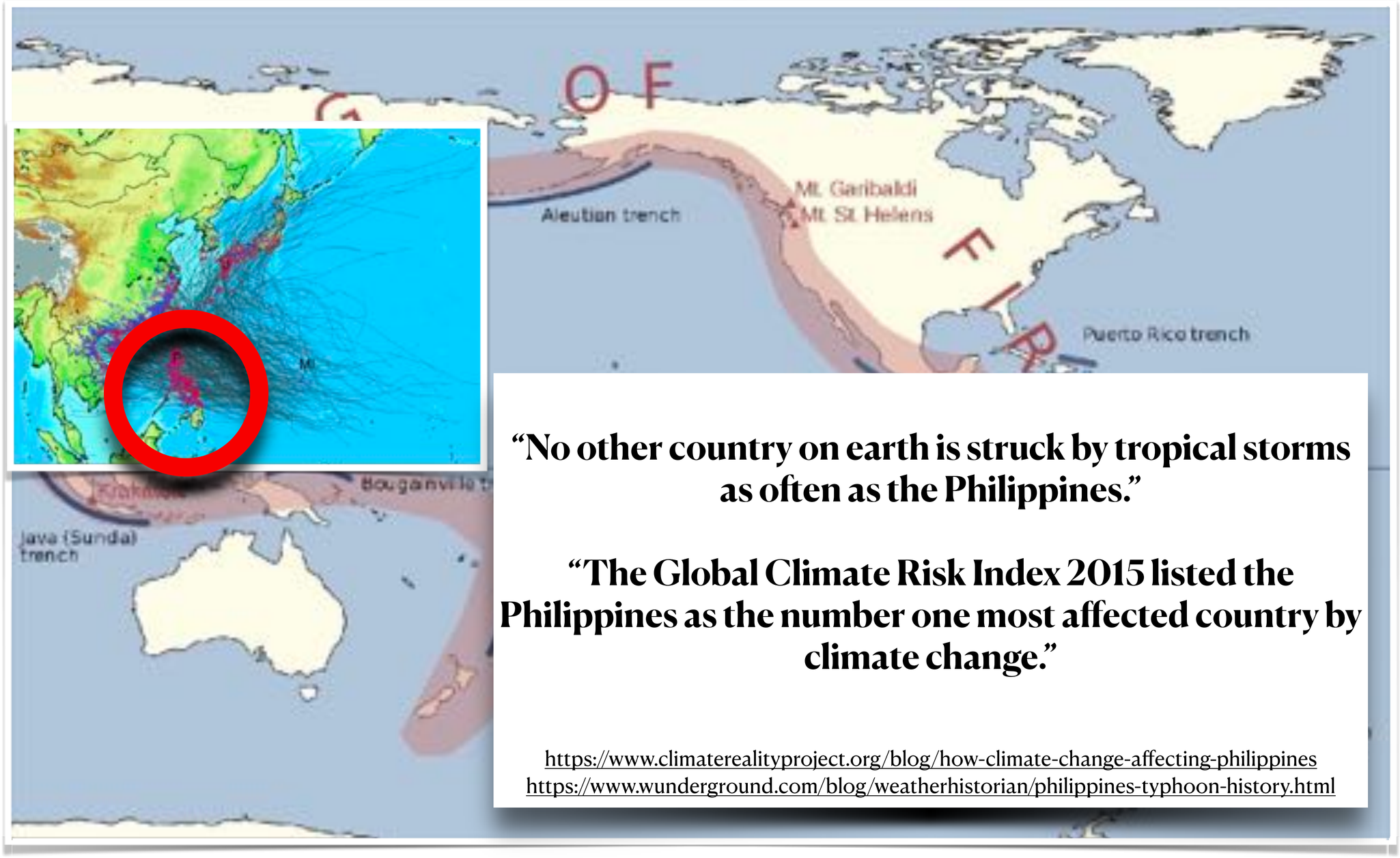
MORAL COGNITION: AN INTERDISCIPLINARY INVESTIGATION OF JUDGEMENT VERSUS ACTION

Investigating the role of personality traits and arousal factors on moral decision making and the moral action and judgement disparity.

#21

ATTENTION, ASSOCIATIVE LEARNING AND CREATIVITY

Exploring learning about non-informative cues and how this relates to measures of creative thinking. (more)



“No other country on earth is struck by tropical storms as often as the Philippines.”

“The Global Climate Risk Index 2015 listed the Philippines as the number one most affected country by climate change.”

https://www.climaterealityproject.org/blog/how-climate-change-affecting-philippines
https://www.wunderground.com/blog/weatherhistorian/philippines-typhoon-history.html

Pacific tropic storm paths image from Goldberg, W. M. (2018). An Introduction to the Tropical Pacific and Types of Pacific Islands. In W. M. Goldberg, The Geography, Nature and History of the Tropical Pacific and its Islands (pp. 1–38). Springer International Publishing. https://doi.org/10.1007/978-3-319-69532-7_1

Typhoon Haiyan (2013)

www.seads.network

Biomodd (+Seeker)
Biodiversity Tower
Art x Futures Literacy

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Biodiversity Tower

Art x Futures Literacy

Biomodd

https://seads.network/hyperproject/biomodd

Global series of art installations in which computer technology and ecology converge. Computer networks built from upcycled computer components are provided with living internal ecosystems. In a symbiotic exchange, plants and algae live alongside electronics and use the latter’s waste heat to thrive. Sensors and robotics provide additional interaction possibilities with the organisms.


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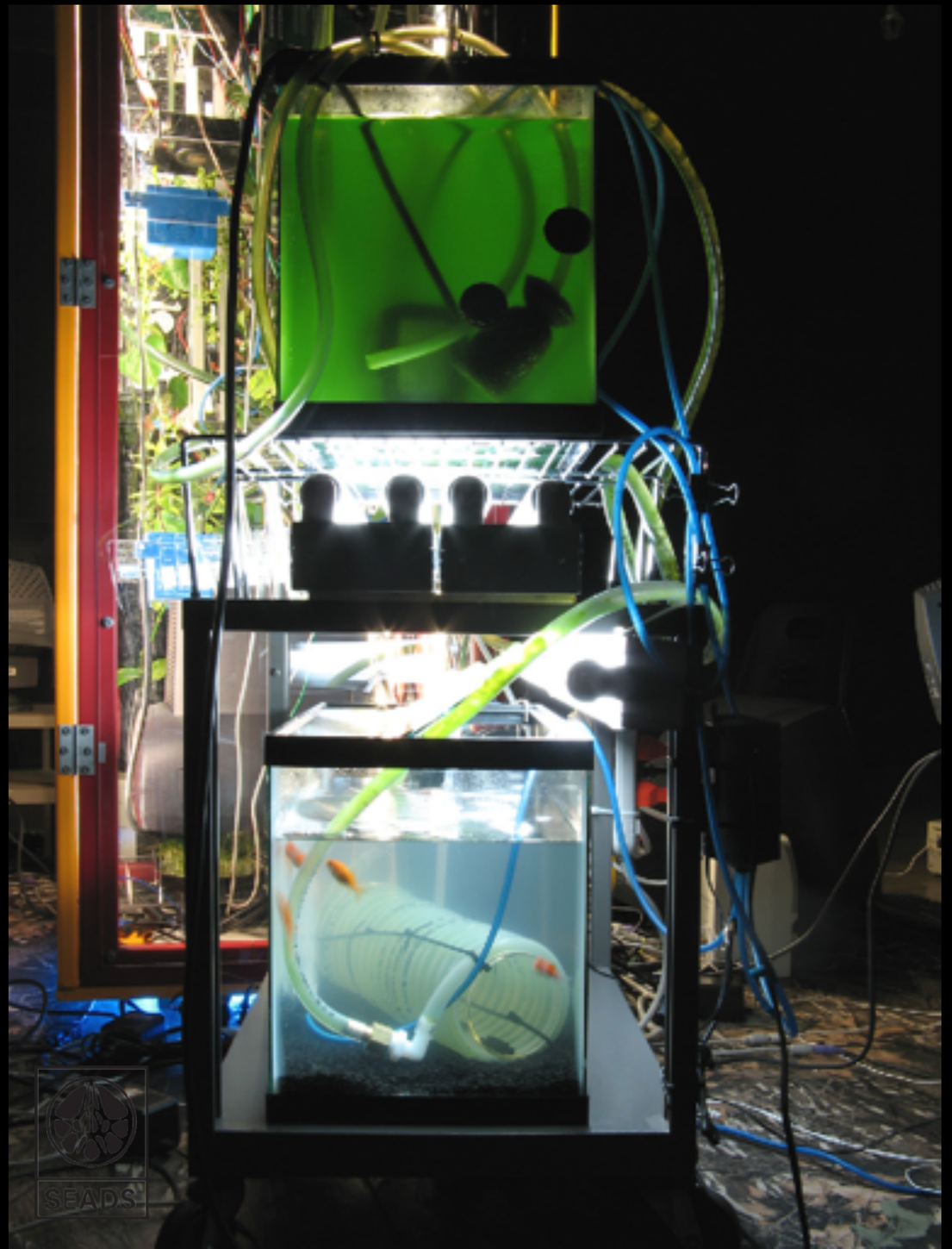
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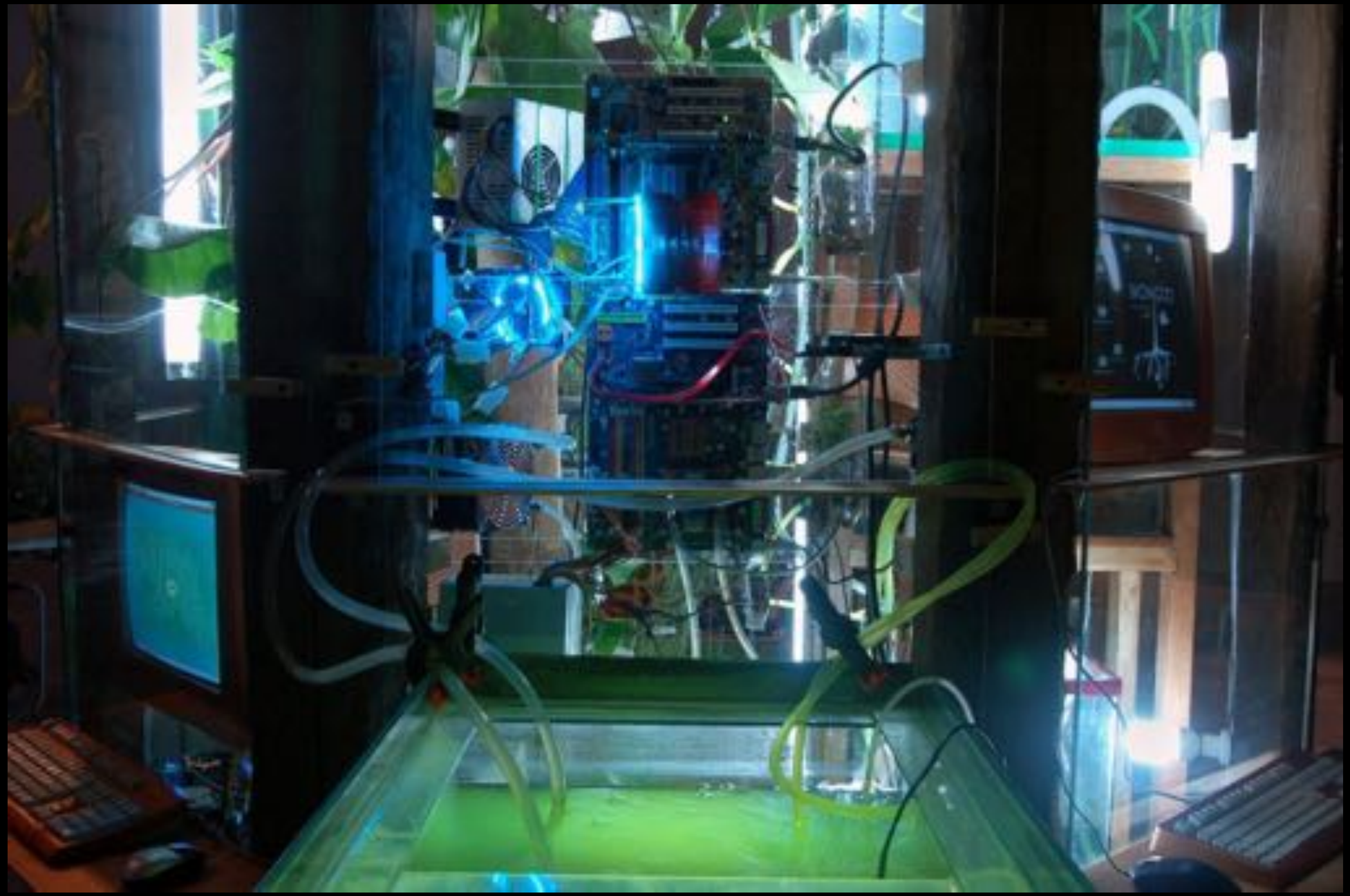
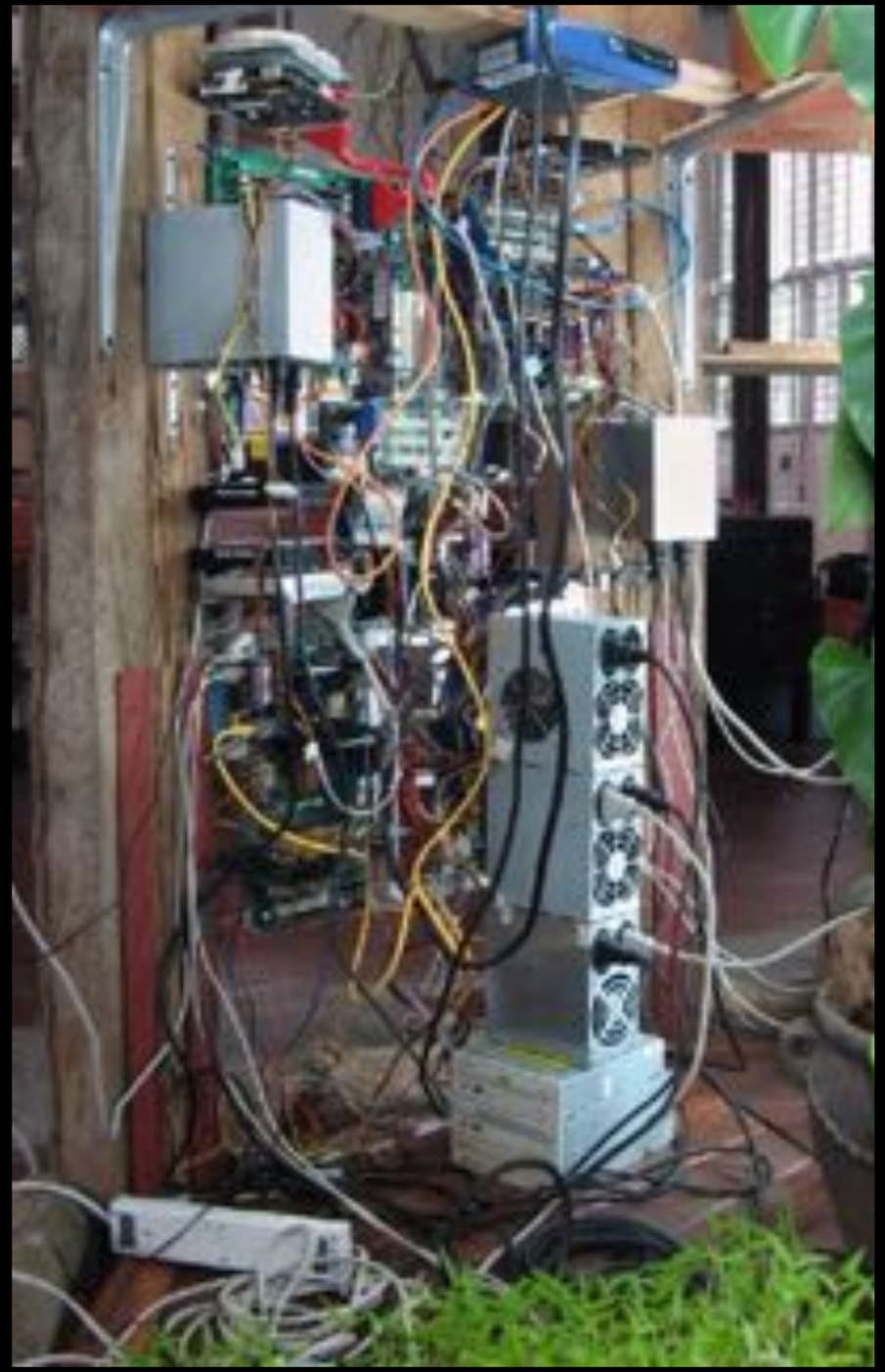
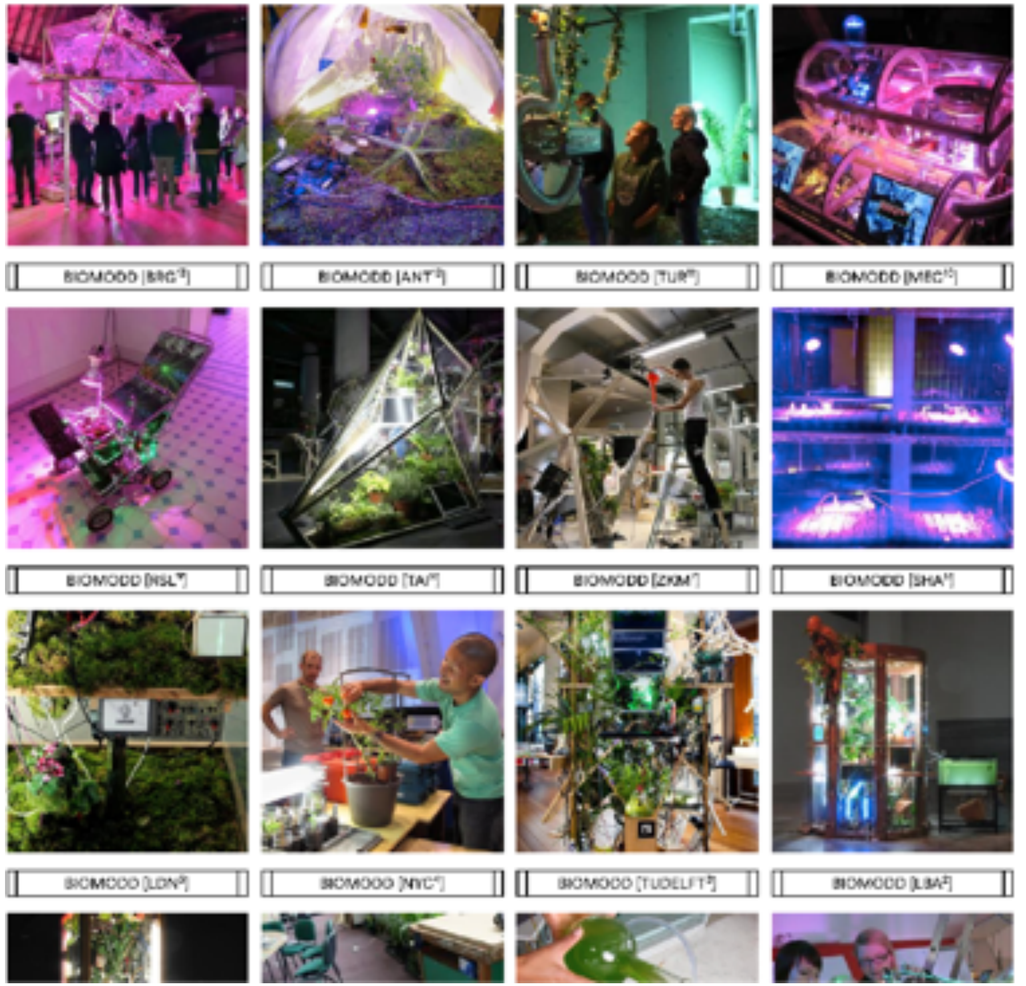





ry 25-27, 2009
Baños, Laguna



Maranan, D. S., & Vermeulen, A. (2015). When Ideas Migrate: A Postcolonial Perspective on Biomodd [LBA2]. Proceedings of the 21st International Symposium on Electronic Art, Session 21. http://archives.isea-web.org/?page_id=95

Seeker: DIY Starship

https://seads.network/hyperproject/seeker

resources

- Studio Time – Future Thinking in Art and Design: Co-Creating Diversified Futures
- The starships of the future won't look anything like Star Trek's Enterprise
- TED Talk about Seeker and HI-SEAS

Seeker is a worldwide series of co-created starship sculptures that evolve over time. In this community art project participants are invited to fundamentally rethink the future of human habitation and survival. Participants build self-sustainable systems simulating interstellar exploration using the methodology of co-creation. This is achieved by radically interconnecting technology, ecology and people, while at the same time tapping into local traditions

Nasser, M., Esteves, A. M., Vermeulen, A. C. J., Maranan, D. S., Peeters, A., & Steyaert, P. (2021, October). Diversifying the concept of analogue missions to explore and evaluate new concepts for future space missions. 72nd International Astronautical Congress, Dubai.

SEEKER [DV[1]]

SEEKER [HS[2]]

SEEKER [EH[3]]

SEEKER [LJ[4]]

Biomodd (+Seeker)
Biodiversity Tower
Art x Futures Literacy

https://seads.network/project/biodiversitytower

BIODIVERSITY TOWER

A community art project by SEADS, Compostmeesters Willebroek & Kris Mys

SPACE
ECOLOGIES
ART AND
DESIGN

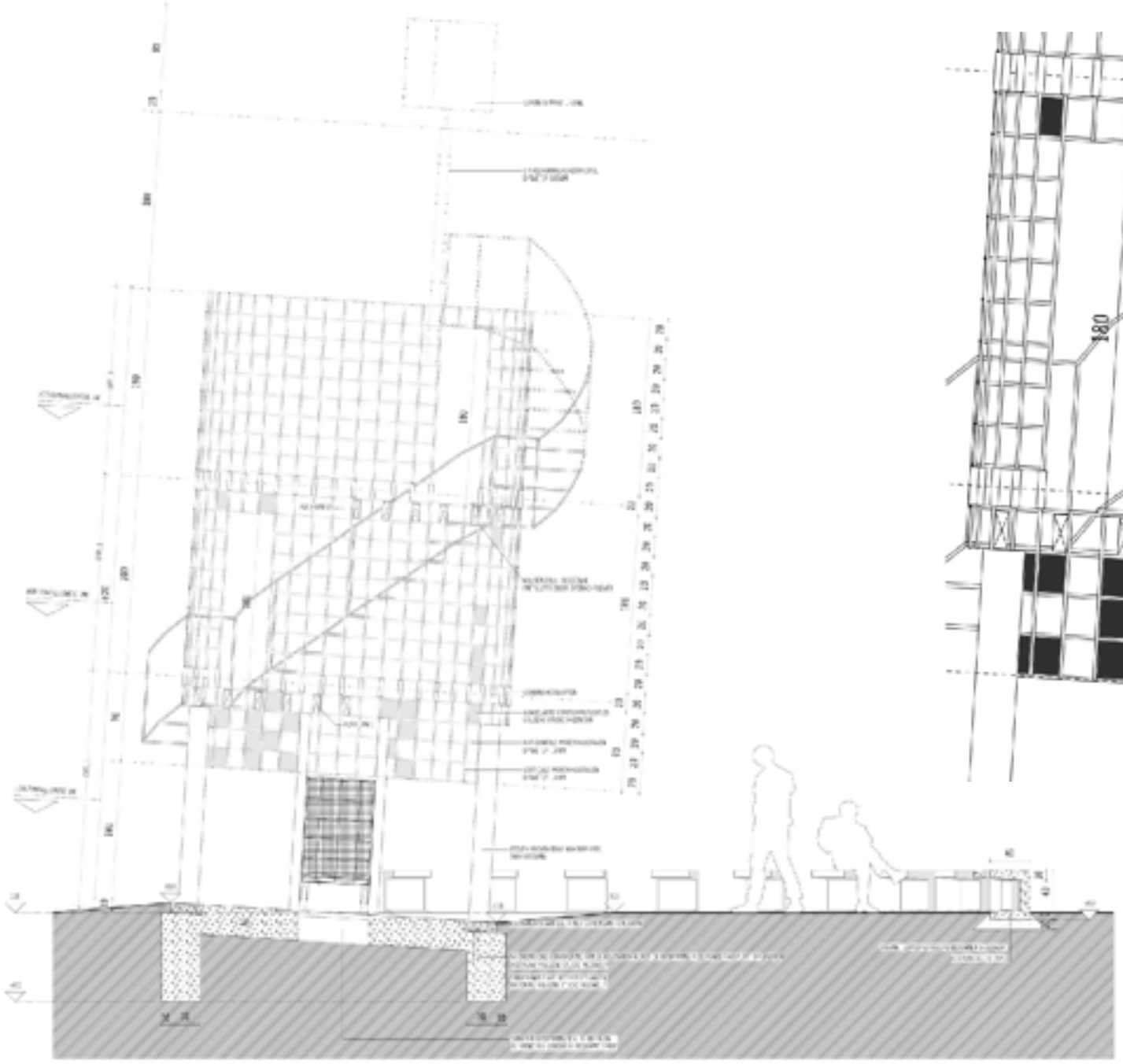
Community composting by the Compostmeesters Willebroek

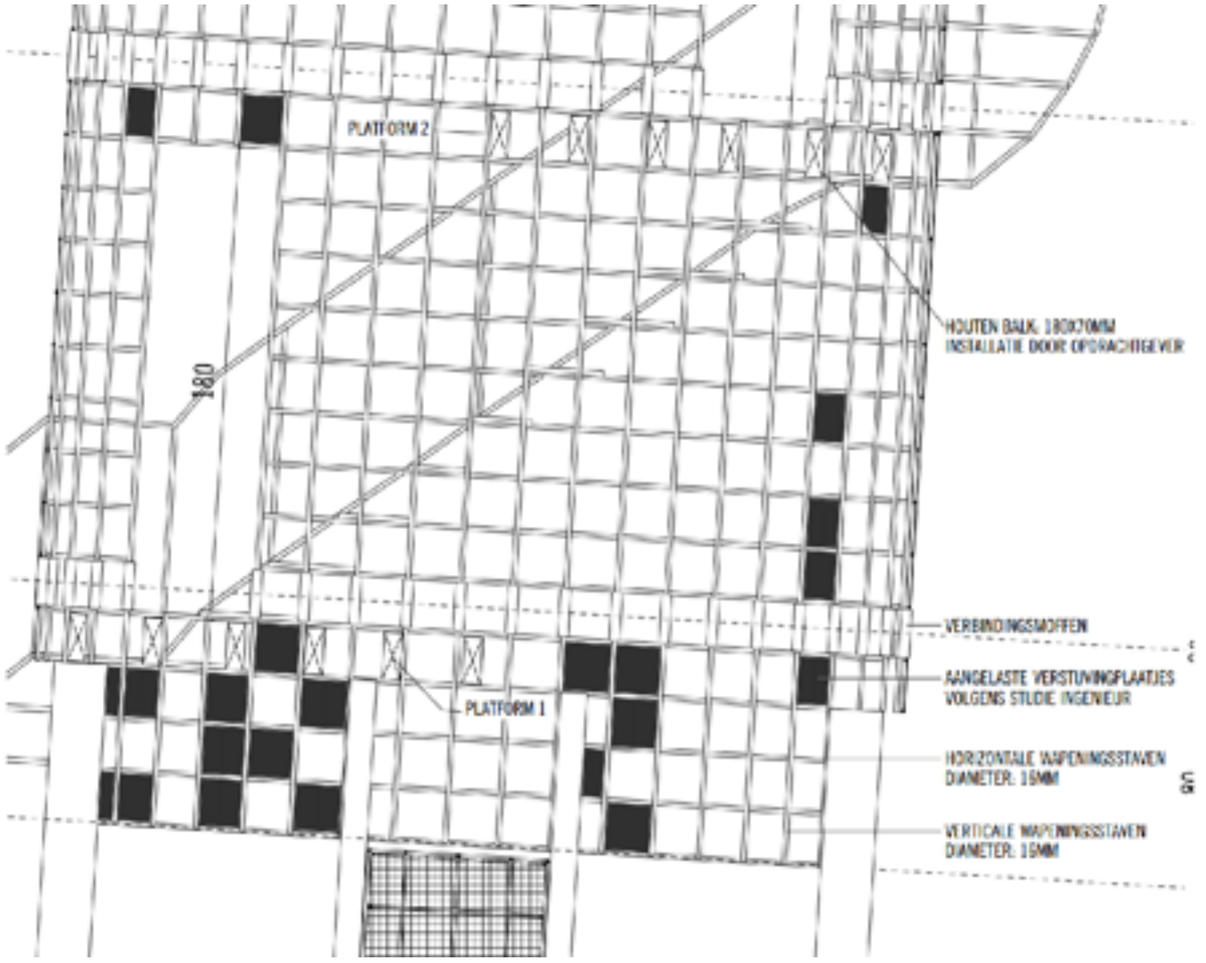
SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015

Co-creation sessions with the Compostmeesters Willebroek and the New Patrons

BIODIVERSITY

PLANTS
WATER
COMPOST





SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Technical drawings of the tower structure

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Foundations and construction process

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Adding floor and terrace support; interior of the tower structure with spiral staircase

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Adding characteristic insect hotel materials

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Adding plants and adjusting the internal organization of the tower

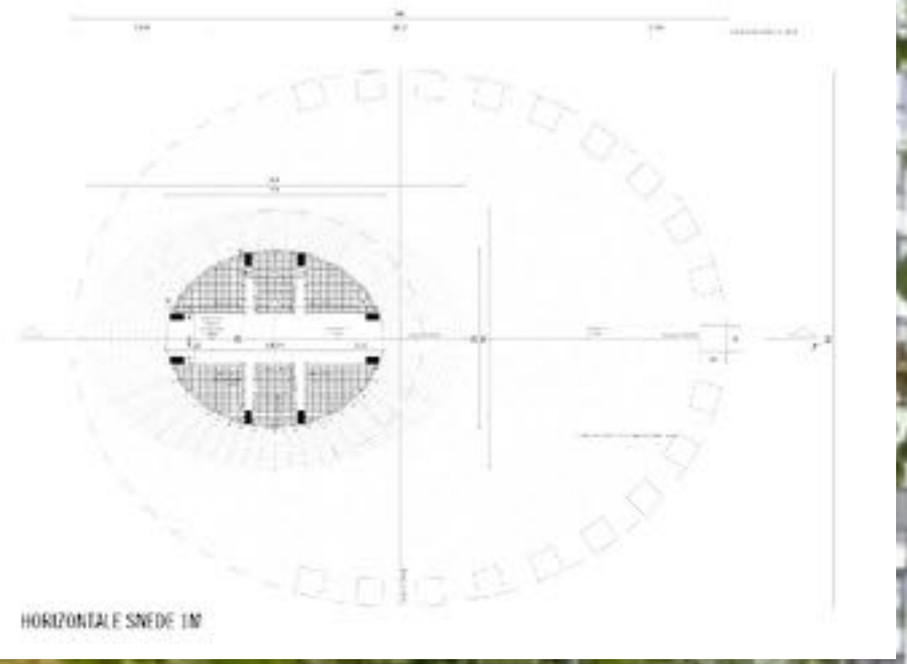
SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Surrounding social housing tower blocks

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Borehole drilling at the foot of the tower

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Installment of Savonius wind turbine for the water pump

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Recovery and redirection of bacterial compost heat throughout the tower ecosystem

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Carpenter bee, ladybug and European rhinoceros beetle (with larva)



SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Public seating area around the tower

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Educational activities organized by Cultural Centre De Ster

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Biodiversity city parade by school children inspired by the project, Willebroek, 2014

SEADS, Kris Mys & Compostmeesters Willebroek, *Biodiversity Tower*, 2015
Official project inauguration, 27 September 2015

Biomodd (+Seeker)
Biodiversity Tower
Futures Literacy

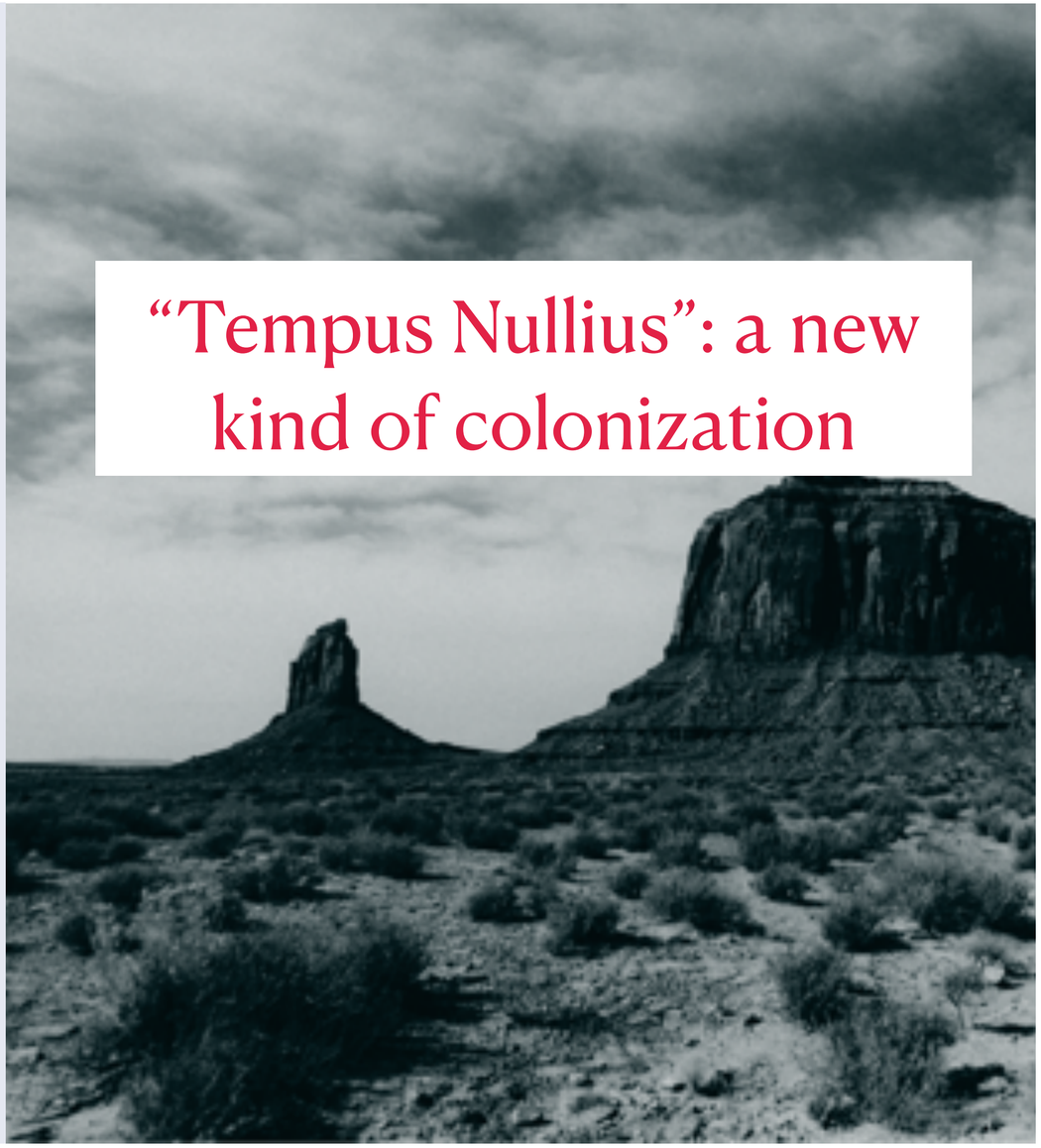
"Full of revelations for everyone who cares about the legacy they leave."—**The Edge,** U2

The Good Ancestor

A RADICAL PRESCRIPTION FOR LONG-TERM THINKING

The most important question we must ask curselves is, "Are we being good ancestors?"
—polio vaccine creator **JONAS SALK**

Roman Krznaric
Author of *Empathy*



"Tempus Nullius": a new kind of colonization

The tug of war for time

Six drivers of short-termism

Tyranny of the Clock
the acceleration of time since the Middle Ages

Digital Distraction
the hijacking of attention by technology

Political Presentism
myopic focus on the next election

Speculative Capitalism
volatile boom-bust financial markets

Networked Uncertainty
the rise of global risk and contagion

Perpetual Progress
the pursuit of endless economic growth

Six ways to think long

Deep-Time Humility
grasp we are an eyeblink in cosmic time

Legacy Mindset
be remembered well by posterity

Intergenerational Justice
consider the seventh generation ahead

Cathedral Thinking
plan projects beyond a human lifetime

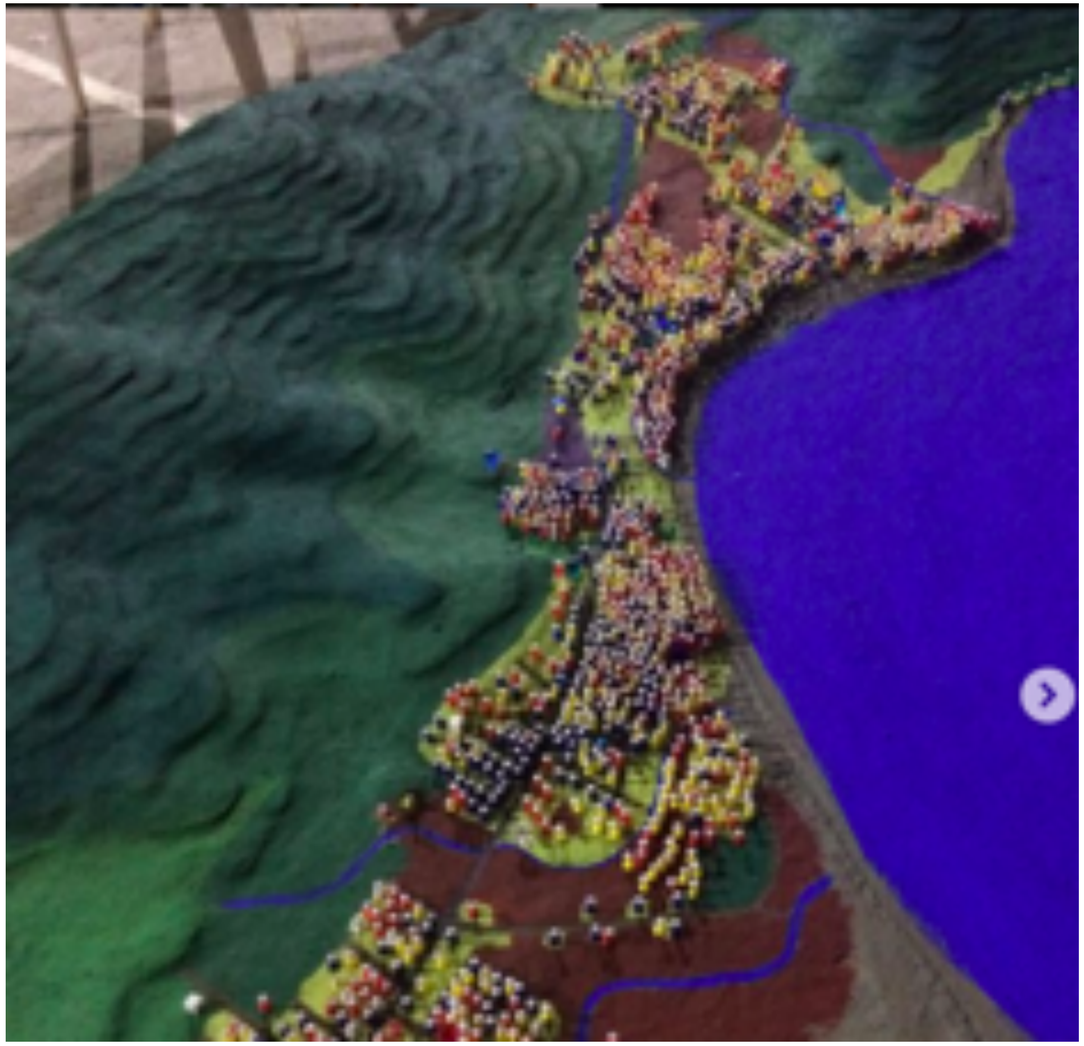
Holistic Forecasting
envision multiple pathways for civilisation

Transcendent Goal
strive for one-planet thriving

How can we develop empathy with the future?

Future self
Future others
Future world

LigtasPad (by Prodjx Artist Collective)



https://www.youtube.com/watch?v=XdqwVWUyopY

Transfigurations (by Agi Haines)

https://www.agihaines.com/transfigurations

"...when making important long-term decisions, vivid representations of one's future self should increase the future-orientation of saving decisions."

Hershfield, H. E. (2011). Future self-continuity: How conceptions of the future self transform intertemporal choice. Annals of the New York Academy of Sciences, 1235(1), 30–43. https://doi.org/10.1111/j.1749-6632.2011.06201.x

Clinical Trials for Interplanetary Missions

Speculative design + imaginative role-playing for evolving scientific processes in preparation for the deep future.

Nasser, M., Knight, J., Haines, A., Maranan, D., Eachempati, P., & Bernard-Cooper, J. (2021, October). Virtual futuristic analogue missions to drive methodological innovation for clinical research for space mission and earth. 72nd International Astronautical Congress, Dubai. https://monanasser.wordpress.com/art-portfolio/clinical-trials-in-future-space-missions/

Ēngines of Ēternity: ISS

https://seads.network/hyperproject/-engines-of-eternity

Ongoing series of interactive installations focusing on a remarkable microscopic aquatic animal — Rotifera— and how it can provoke audiences to reflect on themes of cultural diversity and immortality. In December 2019, SEADS sent a visual artwork together with a rotifer experiment to the International Space Station via a SpaceX rocketship, as part of a collaboration w/ the lab of Prof. Karine Van Doninck at the University of Namur.

Royal Institute of Theatre, Cinema, and Sound Winter School 2022: Climate Change and the new Space Race

For the Winter School 2022, the interesting tension between the climate crisis on the one hand and the new space race on the other will be explored. As the world groans under the effects of the disruption of our planetary ecosystem, billionaires fly to space to experience weightlessness for mere minutes. Both dystopia and utopia seem present in our lives in theatrical ways. But is this rhetorical opposition between a collapsing Earth and the excesses of technology as simple as it seems? Can we, as humans, even bring the world to harmony at all? And isn't it precisely space exploration that helps us to fundamentally improve our understanding of Earth and take care of our planet? Discussing and reshaping our future requires surrendering to ambiguity and breaking with entrenched paradigms.

ColLaboratoire: Early Career Researcher Residency Training

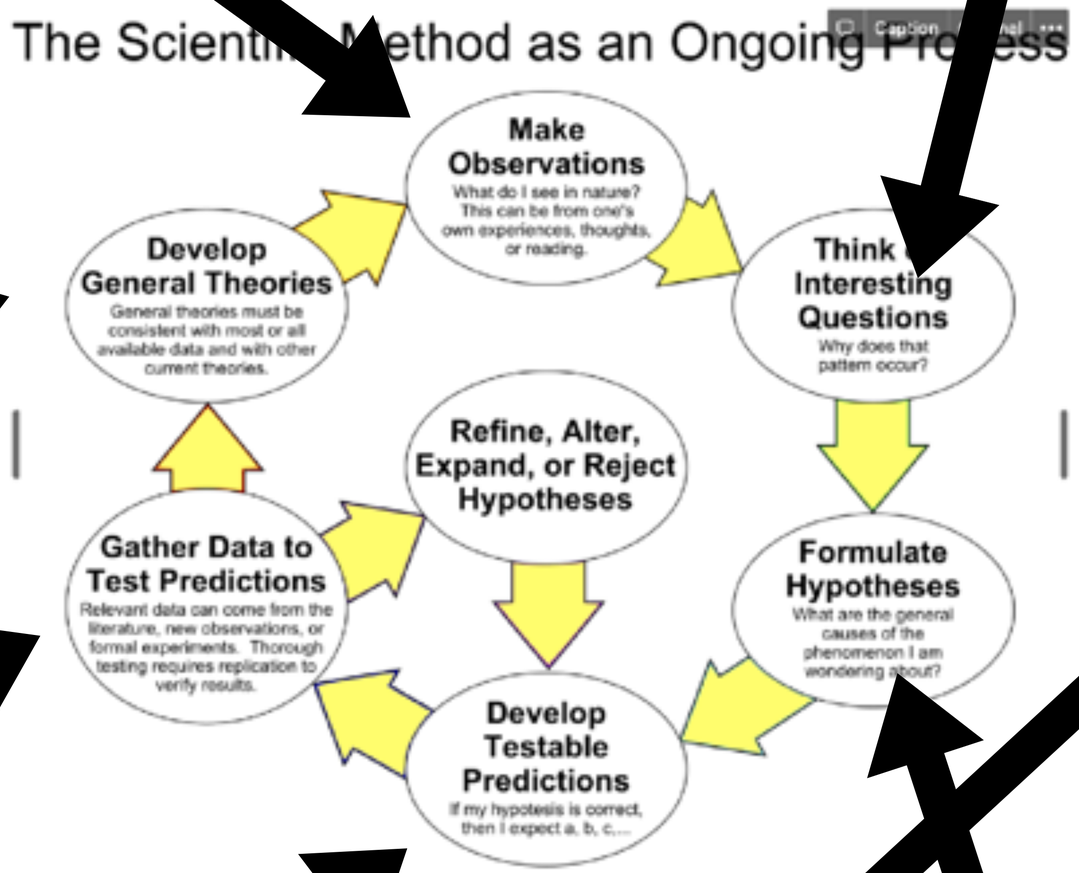
Art

Science

Broadening discussion on creative economies and cultural industries

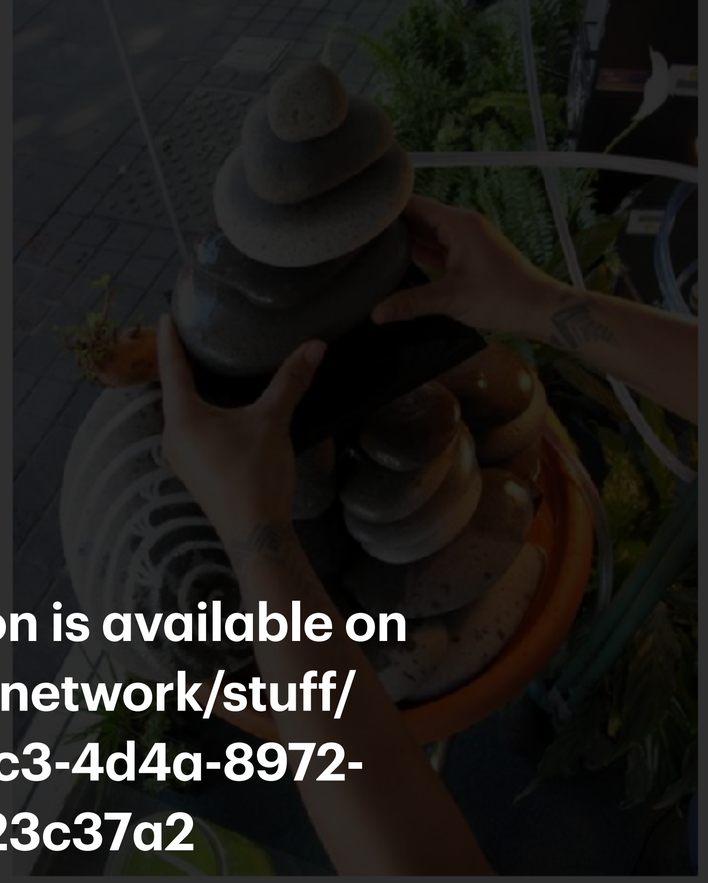
BRITISH COUNCIL

Can the arts and humanities make science better?

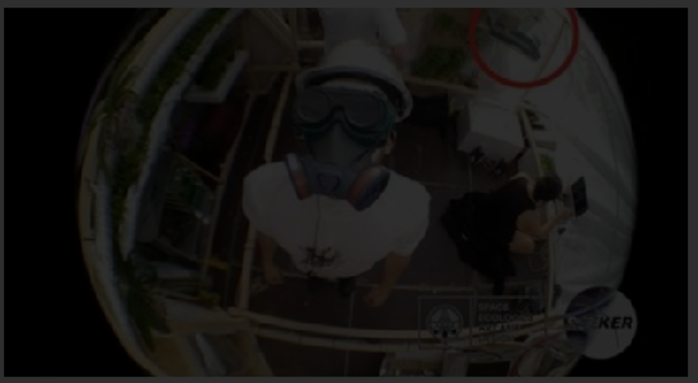
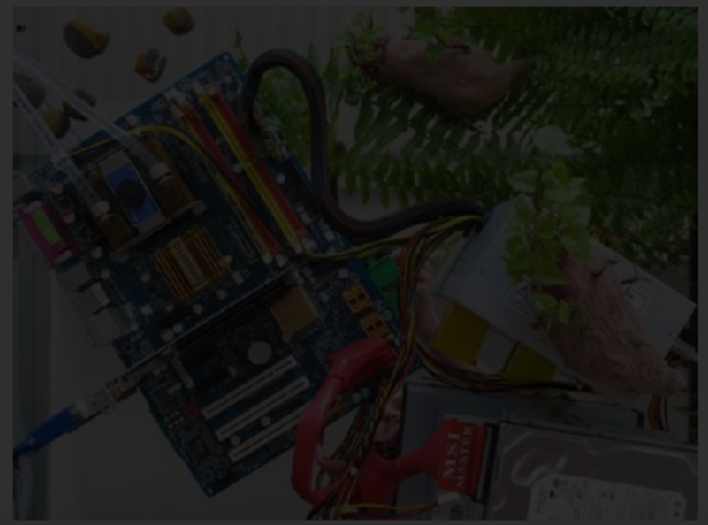
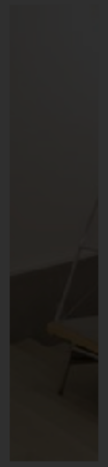
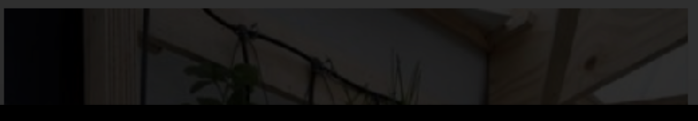
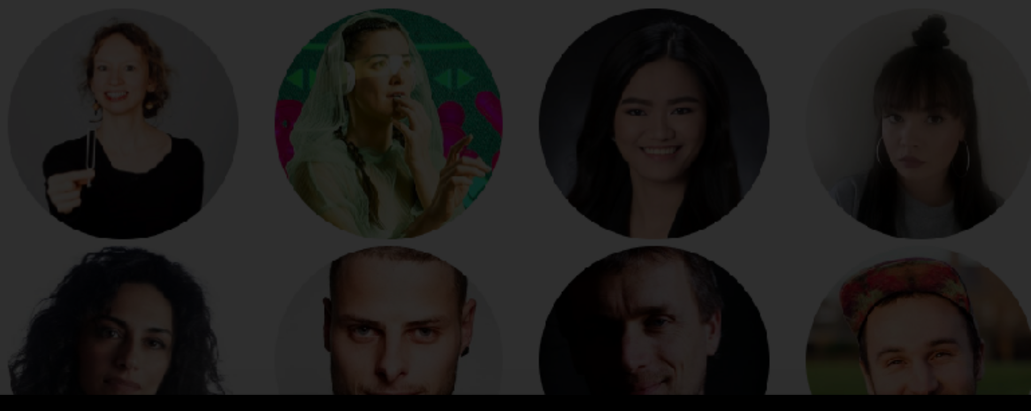


Conne[illegible]R. (2011, February 17). Explaining the Scientific Pr[illegible]ss. NOVA / PBS. https://www.pbs.org/wgbh/nova/article/explaining-the-scientific-process/

6.2.1 Skills for W[illegible]ng at the Science-Policy Interface. (2019, Jul[illegible]). EU Science Diplomacy. https[illegible]ww.s4d4c.eu/topic/6-2-1-science-and-diplomacy-[illegible]different-worlds/



This presentation is available on https://seads.network/stuff/b75648a6-53c3-4d4a-8972-e9d2d23c37a2

SEADS (Space Ecologies Art and Design) is a transdisciplinary and cross-cultural collective of artists, scientists, engineers and activists. Its members come from all corners of the world, from places such as the Philippines, Malaysia, Kosovo, Belgium and the US. SEADS is actively engaged in deconstructing dominant paradigms about the future and develops alternative models through a combination of critical inquiry and hands-on experimentation.

more...